

LEGO ENGINEERING

JUNE 9-26, 2014

Monday-Thursday

WEEK ONE

9:00 A.M.-NOON & 1-4:00 P.M.

Same classes are offered during both sessions.

PRE-K: EARLY SIMPLE MACHINES

ELEMENTARY: BUILDS TO EXPRESS

INTRO TO ROBOTICS

JR. HIGH: SIMPLE & MOTORIZED MECHANISMS

HIGH SCHOOL: MINDSTORMS ROBOT EDUCATOR

WEEK TWO

9:00 A.M.-NOON & 1-4:00 P.M.

Same classes are offered during both sessions.

PRE-K: LEGO IMAGINATION STATION

ELEMENTARY: LEGO STORY STARTER

JR. HIGH: PNEUMATICS

HIGH SCHOOL: INTERMEDIATE ROBOTICS

WEEK THREE

9:00 A.M.-NOON & 1-4:00 P.M.

Same classes are offered during both sessions.

PRE-K: ADVANCED SIMPLE MACHINES

ELEMENTARY: WeDo ROBOTICS CONSTRUCTION

JR. HIGH: MACHINES & MECHANISMS \

RENEWABLE ENERGY

HIGH SCHOOL: ROBOT PROGRAMMING & DATA
EXPERIMENTS



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Community Education
9500 Old Greensboro Road
Box 210
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LEGO[®] ENGINEERING 2014



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Coming to Shelton State is the opportunity for your kids to have a great time while learning critical Science, Technology, Engineering, and Math (STEM) concepts that meet National Science Standards. These classes will help reinforce and add to what your child has learned in the classroom. The class will be facilitated by a LEGO trained instructor. Instructors create a fun, hands on environment to help kids build on their education.

Concepts learned include the following:

- Basic engineering principles
- Design and redesign models
- Gears and gear ratios
- Simple machines
- Forces in motion
- Integrated problem solving
- Communication skills
- Teamwork and collaboration

EARLY SIMPLE MACHINES

Activities are designed to enable students to explore, investigate, and solve tasks related to mechanical principles.

IMAGINATION STATION

Students will work in groups to construct large scenes for a number of real-world and imaginative topics, all while fine-tuning their motor skills.

SIMPLE MACHINES

Students discover basic physical science concepts such as gears, pulleys, levers, and wheels and axles.

BUILD TO EXPRESS

Students will be able to build LEGO models featuring working motors and sensors.

Each session runs for four days at a cost of \$170.00 per camp session. A discounted price of \$140 per session is offered if you enroll in more than one week.

NOTE: Students do not get to bring home any of the Lego projects they create. LEGO® is a trademark of the LEGO Group of companies which does not sponsor, authorize, or endorse our programs.

STORY STARTER

Story Starter is a hands-on learning tool that enhances students' reading, writing, speaking, and listening skills.

WE DO ROBOTICS

Students will build a tower crane, an intelligent house, a Ferris wheel, and a car using STEM concept learning skills.

SIMPLE & MOTORIZED MECHANISMS

Students will build and explore machines and mechanisms, calibrate and capture wind, and study gearing mechanisms.

PNEUMATICS

Students will explore mechanical advantage, balanced and unbalanced forces, and equilibrium.

MACHINES & RENEWABLE ENERGY

Students will explore renewable energy sources, investigate energy supply, transfer, accumulation, conversion, and consumption.

MINDSTORM ROBOT EDUCATOR

Students will build, program, and test solutions based on real-life robotics technology.

INTERMEDIATE ROBOTICS

Students will build larger and more complex models while at the same time providing extra or replacement elements.

ROBOT PROGRAMMING

Students will learn robot programming with the industry-leading graphical system design software used by scientists and engineers worldwide.

Deadline for registration is June 4, 2014 REGISTRATION FORM

Name of Student: _____

Grade Completed: _____

Birth Date: _____ Sex: _____

Class(es) Desired: _____

Name of Parents/Guardian: _____

County: _____

Address: _____

City: _____

State: _____ Zip: _____

Telephone Day: _____

Evening: _____

E-mail: _____

Master Card, Visa, Discover, American Exp. #

_____/_____/_____/_____

EXP: _____ Security Code #: _____

☐ I have enclosed full payment of \$155.00 per child per course.

For more information call
205.391.2360.

Make checks payable to Shelton State Community College.
Please include DL#, SS#, and date of birth on the check.

MAIL TO
Shelton State Community College
Community Education
Box 210
9500 Old Greensboro Road
Tuscaloosa, AL 35405